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**Pirttiniemi et al.**

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(54) **METHOD AND AN ARRANGEMENT FOR DETERMINING A DEGREE OF FULLNESS OF A LARGE GRINDING MILL DRUM, AND A LARGE GRINDING MILL DRUM**

(58) **Field of Classification Search**  
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See application file for complete search history.

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(57) **ABSTRACT**  
The present invention relates to the field of mineral and metallurgical processes, to disintegrating in general and to disintegrating by tumbling mills, and more particularly to a method and arrangement for determining a degree of fullness of a large grinding mill drum, and to a large grinding mill drum. An arrangement for determining a degree of fullness of a grinding mill drum has a sensor arrangement attached to at least one lifting bar bolt of an at least one lifting bar of the grinding mill. The sensor arrangement includes at least one force transducer attached to the at least one lifting bar bolt. With the help of the measurement arrangement, more reliable measurement data can be provided for the determination of the degree of fullness of a grinding mill drum.

**11 Claims, 7 Drawing Sheets**

